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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,666	06/25/2003	Ford Oxaal	GRND-24C	7876
29106	7590	11/20/2006		EXAMINER
GROOVER & HOLMES				YANG, RYAN R
BOX 802889			ART UNIT	PAPER NUMBER
DALLAS, TX 75380-2889			2628	

DATE MAILED: 11/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Supplemental Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/602,666	OXAAL, FORD	
	<b>Examiner</b>	<b>Art Unit</b>	
	Ryan R. Yang	2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 27 December 2005.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1 and 17-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1 and 17-42 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

**DETAILED ACTION**

1. This action supersedes the Office Action issued 8/22/2006. This action is responsive to communications: Preliminary Amendment, filed on 12/27/2005. This action is non-final.
2. Claims 1 and 17-42 are pending in this application. Claims 1, 23, 33 and 42 are independent claims. In the Amendment, filed on 12/27/2005, claims 2-16 were canceled, and claims 17-42 were added.

This application is a continuation of Application No. 09/871,903, filed 6/4/2001, now abandoned, which is a continuation of Appl. No. 09/228,760, filed 1/12/1999, now Patent No. 6,243,099, and which is a continuation-in-part of Application No. 08/749,166, filed 11/14/1996, which has a provisional application no. 60/006,800, filed 11/15/1995.

3. The present title of the invention is "Method for interactively viewing full-surround image data and apparatus" as filed originally.

***Double Patenting***

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1, 23, 24, 33 and 42 are rejected under the judicially created doctrine of double patenting over claims 11-12 of U. S. Patent No. 6,243,099 since the claim, if allowed, would improperly extend the "right to exclude" already granted in the patent. The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows:

Claims 11-12 of patent number 6,243,099 clearly and explicitly teach claim 1 of the present application (col. 9, lines 41-55). The claim 11 of the application recites the exact wording of claim 1 in present application except for selecting "a direction". It is apparent that claim 12 of patent number 6,243,099 discloses selecting a direction of view because the limitations explicitly state "rotating the direction of view in the opposite direction".

Claims 23-24 of the present application are rejected because claims 11-12 of patent number 6,243,099 covers the claimed limitations with a more specific scope.

Claim 33 of the present application is rejected because claims 11-12 of patent number 6,243,099 covers the claimed limitations with a more specific scope.

Claim 42 of the present application is rejected because claims 11-12 of patent number 6,243,099 covers the claimed limitations with a more specific scope.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 17-22, 25-32 and 34-41 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As per claims 17-21, 26 and 35, the specification does not disclose the p-surface is comprised of one or more polygons.

As per claim 22, the specification does not disclose the full-surround image data is a sample of incoming image data.

As per claims 25 and 34, the specification does not disclose the incoming image is wide-angle image data.

As per claims 27 and 36, the specification does not disclose a hemispherical surface comprising polygons, a surface capable of being texture mapped with a wide-angle view, and a surface capable of being texture mapped with at least part of a wide-angle view.

As per claims 28 and 37, the specification does not disclose the p-surface is selected from the group consisted of a convex surface, a concave surface, and a planar surface.

As per claims 29 and 38, the specification does not disclose the polygon comprises polygons approximating a partial sphere.

As per claims 30-32 and 39-41, the specification does not disclose wherein the p-surface comprises one or more polygons such that there exists a half-space for each polygon, and wherein all such half-spaces include at least one point in common.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1, 23, 24, 33 and 42 are rejected under 35 U.S.C. 102(e) as being anticipated by Chiang et al. (6,028,584).

As per claim 1, Chiang et al., hereinafter Chiang, discloses a method of modeling of the visible world using full-surround image data, said method comprising:

selecting a view point within a p-surface (Figure 4, point 48 is a selected view point and 42 is a p-surface);

selecting a direction of view within the p-surface (Figure 4, item 44 is a view direction);

texture mapping full-surround image data onto said p-surface such that the resultant texture map is substantially equivalent to projecting full-surround image data

onto the p-surface from said view point to thereby generate a texture mapped p-surface (Figure 2 is a texture mapping process where the texture map is substantially equivalent to projecting full-surround image data onto the p-surface); and

displaying a predetermined portion of said texture mapped p-surface ("The view plane is displayed on the display", Abstract).

10. As per claim 23, Chiang discloses a method of modeling a view using incoming image data, comprising the steps of:

texture mapping the incoming image data onto the p-surface to produce a texture mapped p-surface (Figure 2 is a texture mapping process where the texture map is substantially equivalent to projecting full-surround image data onto the p-surface);

displaying a portion of the texture mapped p-surface ("The view plane is displayed on the display", Abstract).

11. As per claim 24, Chiang demonstrated all the elements as disclosed in the rejected claim 1, and further discloses the displayed portion depends on a viewpoint selected ("The view plane is displayed on the display", Abstract).

12. As per claims 33, Chiang discloses a method of modeling a view using incoming image data comprising the steps of:

selecting a point associated with a p-surface (Figure 4, point 48 is a selected view point and 42 is a p-surface);

texture mapping incoming image data onto said p-surface such that the resultant texture map is substantially equivalent to projecting incoming image data onto the p-

surface from said point to thereby generate a texture mapped p-surface (Figure 2 is a texture mapping process where the texture map is substantially equivalent to projecting full-surround image data onto the p-surface).

13. As per claim 42, Chiang discloses a system for modeling a view using incoming image data comprising:

means for selecting a point associated with a p-surface (Figure 4, point 48 is a selected view point and 42 is a p-surface);

means for texture mapping incoming image data onto said p-surface such that the resultant texture map is substantially equivalent to projecting incoming image data onto the p-surface from said point to thereby generate a texture mapped p-surface (Figure 2 is a texture mapping process where the texture map is substantially equivalent to projecting full-surround image data onto the p-surface).

14. Since the claim limitations of independent claims are not support by the specification, the scopes of the claims are not clear.

### ***Conclusion***

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

### ***Inquiries***

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan R. Yang whose telephone number is (571) 272-7666. The examiner can normally be reached on M-F 8:30AM-5:00PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on (571) 272-7664. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Ryan Yang  
Primary Examiner  
November 16, 2006